M242 Boat Preparation

The preparation required to get a stock 242 racing is minimal but essential.

If you want to make any changes to your boat be sure to check the class rules.

Some Key pointers:

Jib Track modification - One important (and legal) modification is to drill extra holes in the stock jib tracks to allow more precise positioning of the jib lead. The modified tracks should have holes 5/8" from center to center.

Main Halyard - Another important change is to substitute a <u>3/8" Kevlar composite or</u> <u>spectra for standard pre-stretch Dacron main halyard.</u>

Spinnaker Sheets - We also suggest using Spectra tapered spinnaker sheets - <u>60 feet of 3/16" Spectra with 40 feet of 3/8" Polyester casing</u>.

These tapered sheets are easy to handle, do not stretch, and lift easily in light airs. *Good Compass* - a good compass is essential such as a KVH or TacTic mounted on the mast.

Rig Tuning

Tuning the 7/8ths rig on the M242.

Forestay - First, make sure that your factory-supplied forestay is the maximum-allowed length of 27'1 1/4".

Mast - Next, the mast should be blocked forward in the mast collar (partners) as far as possible, which will straighten the mast in the area of the mainsail luff and keep the forestay tighter.

Upper Shrouds - should be very tight - <u>approximately 600 pounds of tension</u> if you use a tension gauge. When beating in 12 to 14 knots of (true) wind, the uppers on the leeward side should be firm.

Lower Shrouds - At the same time, the Lower Shrouds should be tightened so that the mast is as straight as possible athwartships.

The Loos Tension Gauge would read **45 upper 35 lower**. The spreader angle is not <u>adjustable</u>.

Mainsail Trim

The mainsheet has two functions: It controls the leech of the main, and it provides headstay tension for the jib.

Backstay - Don't use the Backstay to bend the mast or tension the Headstay as this will over-flatten the main, and leech tension will be lost.

Leech - The leech should be kept straight with a tight mainsheet.

Main Telltales - From 7 to 14 knots upwind the telltale on the top batten on the main should be stalled about two-thirds of the time.

<u>Below 7 knots</u> the sheet should be eased enough to keep the telltale just flying all the time.

<u>Above 14 knots</u> the upper part of the tapered mast will automatically bend to open the main leech and flatten the main. In very windy and rough conditions it may be faster to ease the mainsheet four to six inches to open up the main leech even more. Once again the backstay isn't necessary.

Traveler - Next to the mainsheet, the traveler is the most important sail control. Mainsheet tension allows the M242 to point; <u>dropping the traveler helps the M242 to foot</u>.

Getting the M242 up to speed - start with the mainsheet in tight and the traveler to the point listed in Table I for the current wind speed. If your speed drops excessively, lower the traveler a little; think of the traveler as your gas pedal.

Main Outhaul - should be kept within <u>1" to 2" of maximum when sailing upwind in any</u> <u>breeze over about 8 knots</u>, and in lighter winds it should be eased slightly more. When <u>reaching and running ease the outhaul another 2" from the outhaul setting for that wind</u> speed.

Cunningham - <u>kept loose in all wind speed under 15 knots</u>. Don't use it as a wrinkle remover as those wrinkles are fast!

Once the wind reaches 15 knots, the Cunningham can be pulled on quite tightly to keep the draft forward in the sail.

Boomvang - on the 242 is very powerful (12:1) and <u>is not normally used upwind</u>. When reaching and running, be careful not to over tension the main leech with the Vang – let the leech breathe and keep the telltales from stalling.

Table I – Mainsheet Traveler Position

Wind Speed & Traveler Position

Wind Speed	Traveler Position
0-5 Knots	Center - 15" up
5-10 Knots	Center - 8" up
10-15 Knots	Center - 4" down
15-20 Knots	8-12" down
20-25 Knots	12-18" down

<u>Jib Trim</u>

- 1. The first step in setting up the Jib is to *tighten the Halyard Adjuster* inside the zipper luff of the sail until the slack is taken out of the jib luff.
- 2. Next, *position the Jib Lead* so that when the jib is pulled in tight, the leech and the foot have roughly equal tension neither should be too tight.
- 3. Then <u>set the Jib Halyard Tension</u> so that the jib clew will just touch the lead block when the sheet is pulled in very tightly. This Jib Halyard Tension is a good starting point for most wind conditions.
- Calibrate the <u>Halyard Adjustment by marking the sail when it is fully hoisted</u>.
 When using the setting described above, the jib luff will appear quite loose don't be alarmed, as this keeps the jib luff entry fine, and allows you to point high.

Jib Leads - As the wind speed rises above 14 knots, the jib leads should gradually be moved aft about 4". This allows the jib to twist off and open up the slot.

Jib Trim vs Main - If the Main flogs in strong winds it means the jib is trimmed to tight – move the leads aft or ease the sheet. A flogging main does not always mean that the jib is not balanced. The most common sail trimming error in strong winds is over trimming.

Spinnaker Trim

The M242 spinnaker is quite tall and is very sensitive to pole position.

Clews - The Spinnaker Clews <u>should be level</u>, or the pole clew (tack) should be up to 6" lower than level.

Pole Height - Keep a close eye on the pole height, particularly in shifty conditions when constant adjustment will be required. The fore – and aft position of the pole is also a sensitive adjustment can make a huge difference. Mark the spinnaker sheets near the winches when the clews are near the forestay to help you in reach-to-reach jibes and spinnaker sets.

Weight Placement

Most of the top boats in the class sail with four people, but the boat can be sailed by three easily.

- <u>Athwartships heel should be small (less the 12 degrees) in all but the very</u> <u>lightest conditions</u>.
- When beating and running in fewer than 5 knots, it will pay to use some heel to reduce the wetted surface and keep the sails still. Fore-and-aft weight positioning is also important.
- In most wind speeds the crew weight should be centered about 30" aft of the cabin back, both up and downwind.
- When running and reaching in heavy air, move the weight back another 12" to <u>18".</u>

The most common trim errors:

- 1. Having too much weight aft when running in heavy air.
- 2. Not enough weigh aft when reaching in moderate air.
- 3. <u>On a spinnaker reach in 12 to 14 knots</u> of wind, the bow must be kept from digging in by shifting the crew weight aft. <u>The spinnaker trimmer should be on the weather</u> <u>rail near the cabin back,</u> not at the mast.
- 4. <u>In light air when running, the crew weight should be centered fore-and-aft in or near</u> the front of the companionway opening, or standing in the cockpit.

The Martin 242 is a straightforward boat to sail. Its simplicity allows less experienced sailors to get up to speed quickly and race evenly with the experts. Racing in this Class is very tight, and we hope the article will assist newcomers in their reach for the top.